

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A compound inkjet print head printer with a compound print head module, being characterized in that the compound print head module includes at least two print heads to provide ink droplets of a same color but with different sizes of ink droplets, and an ink-detecting module to directly determine the operation and relative distance between the print heads of the compound print head module before ink droplet ejection, said print heads being mounted on a tuning mechanism to adjust the relative distance between the print heads in response to the ink detecting module, so that the compound print head module simultaneously provides ink droplets of at least two sizes in a ~~print stroke~~print drop to form multi-gradation pixels with a reduced number of print strokes and an increased printing speed.

2. (Cancelled)

3. (Previously Presented) The printer of claim 1, further comprising more than one tuning mechanism.

4. (Previously Presented) The printer of claim 1, wherein the tuning mechanism includes a base, a screw-adjusting device and a sliding piece, the screw-adjusting device is mounted on the base in a manner to abut against the sliding piece through a top rod, so that when the screw-adjusting device rotates, the top rod is driven to push the sliding piece forth; two springs abutting against a side of the sliding piece opposite to the guide rod to achieve distance tuning; and the print heads being respectively mounted on their corresponding sliding pieces of the tuning mechanism.

5. (Previously Presented) The printer of claim 1, wherein the tuning mechanism is a motor control module.

6. (Previously Presented) A compound inkjet print head printer with a compound print head module, being characterized in that the compound print head module includes first and second print heads, and an ink-detecting module to directly determine the operation and relative distance between the first and second print heads of the compound print head module before ink droplet ejection, said print heads being mounted on a tuning mechanism to adjust the relative distance between the print heads in response to the ink detecting module, wherein the volume of ink droplets from the first print head is N pico-liter (pl), the volume of ink droplets from the second print head is M pl, N being larger than M, the ink droplets from the first and second print heads having at least one color, various gradations at proper pixel positions being printed with a combination of N pl ink droplets from the first and M pl ink droplets from the second print head.

7. (Cancelled)

8. (Previously Presented) The printer of claim 6, further comprising more than one tuning mechanism.

9. (Previously Presented) The printer of claim 6, wherein the tuning mechanism includes a base, a screw-adjusting device and a sliding piece, the screw-adjusting device is mounted on the base in a manner to abut against the sliding piece through a top rod, so that when the screw-adjusting device rotates, the top rod is driven to push the sliding piece forth; two springs abutting against a side of the sliding piece opposite to the guide rod to achieve distance tuning; and the first inkjet print head and the second inkjet print head being respectively mounted on their corresponding sliding pieces of tuning mechanisms.

10. (Previously Presented) The printer of claim 6, wherein the tuning mechanism is a motor control module.